

REMARKS

In response to the Office Action dated June 4, 2002, claims 13 and 34 are amended, and claims 18, 19, 36 and 37 are canceled. Claims 13-17, 20, 21, 31-35 and 38-42 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. §103

Claims 13-21 and 31-33 are rejected under 35 U.S.C. §103(a) as being unpatentable over Rokutanzono et al., (hereinafter, Rokutanzono) in view of Bergmann et al. (hereinafter, Bergmann).

Claims 34-42 are rejected under 35 U.S.C. §103(a) as being unpatentable over Rokutanzono in view of Bergmann, as applied to claims 13-21 and 31-33 above, and further in view of *Organic Photoreceptors for Imaging Systems*, to Borshenberger, pp. 25-35 and 289-296.

The rejections are respectfully traversed as to claims 19 and 37.

The tantalum doped tin oxide used in the present invention has the man particle size of 0.3 to 1.0 micrometers as recited in claims 19 and 37. When the particle size is too large, cleaning characteristics are reduced. When particle size is too small, it becomes difficult to achieve uniform dispersion of the particle within the layer, leading to inadequate cleaning.

Rokutanzono discloses the surface protective layer containing antimony doped tin oxide having a size of 0.3 micrometers or less, preferable 0.1 micrometers or less (column 3, lines 3-7) considering the transparency of the protective layer. The object of Rokutanzono is to provide an electrophotographic photoconductor that contains a

protective layer having high transparency. Namely, when the size of antimony doped tin oxide is larger than 0.3 micrometers, the object cannot be sustained.

Bergmann discloses transparent coatings prepared from tantalum doped tin oxide powder having a size of 0.05 to 15 micrometers (column 4, lines 5-7). Bergmann does not disclose or suggest a relation between the size of powder and the toner cleaning characteristics.

To expedite prosecution, independent claims 13 and 34 are amended to delineate that the tantalum doped tin oxide has a mean particle size of 0.3 to 1.0 micro-meters, which is not disclosed or suggested by Rokutanzone and Bergmann, considered alone or in combination.

Evidence in the Specification

Tantalum-doped tin oxide is contained in the protective overcoat layer of Example 1 of the present application, but is not contained in Reference Example 1 of the present application. The appropriate content of tantalum-doped tin oxide gives the wear resistance and injury resistance to the overcoat layer. Accordingly, the shaving amount of Example 1 (0 in amended Table 2) is clearly different from the Reference Example 1 (X in Table 2).

Applicants submit that the only suggestion of using tantalum doped tin oxide for a surface layer of a photosensitive member is in the present application. However, Applicants' disclosure may not properly be relied upon to support the ultimate legal conclusion of obviousness under 35 U.S.C. §103. *Panduit Corp. v. Dennison Mfg. Co.*,

supra. Therefore, a conclusion of obviousness is not warranted and it is urged that the rejection be withdrawn.

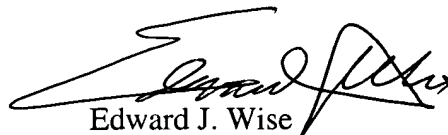
CONCLUSION

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY


Edward J. Wise
Registration No. 34,523

600 13th Street, N.W.
Washington, DC 20005-3096
(202)756-8000 EJW:kbb
Facsimile: (202)756-8087
Date: November 4, 2002

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please amend the specification as follows:

At page 41, the first paragraph under Example 1:

1 pbw [χ -] τ -type nonmetallic phthalocyanine, 0.5 pbw polyvinylbutyrol, and 50 pbw tetrahydrofuran (THF) were dispersed using a sand mill. The obtained phthalocyanine dispersion fluid was applied on the surface of an aluminum drum and dried to form a charge generating layer 0.3 μm in thickness.

At page 42, the first full paragraph after Example 2:

1 pbw [χ -type] τ -type nonmetallic phthalocyanine, 0.5 pbw polyvinylbutyrol, and 50 pbw tetrahydrofuran (THF) were dispersed using a sand mill. The obtained phthalocyanine dispersion fluid was applied on the surface of an aluminum drum and dried to form a charge generating layer 0.3 μm in thickness.

At page 43, the first full paragraph after Reference Example 1:

A photosensitive member was produced in exactly the same way as in Example 1 with the exception that tantalum-doped tin oxide was not contained in the protective overcoat layer.

At page 44, Table 2:

| | $E_{1/2}$ (erg/cm ²) | | Image | | Shaved amt | Vo(V) | | DDR ₁ (%) | |
|-------|----------------------------------|---------------|---------|---------------|---------------|---------|---------------|----------------------|---------------|
| | Initial | After 5000 | Initial | After 5000 | After 5000 | Initial | After 5000 | Initial | After 5000 |
| Ex 1 | 2.5 | 2.6 | [±] 0 | [±] 0 | [±] 0 | -750 | -750 | 3.3 | 3.8 |
| Ex 2 | 2.7 | 2.9 | [±] 0 | [±] 0 | [±] 0 | -760 | -750 | 3.6 | 3.8 |
| Ref 1 | 4.5 | 9.8 | x | x | x | -770 | -780 | 2.5 | 2.9 |
| Ref 2 | 3.1 | 5.6 | [±] 0 | x | [±] 0 | -760 | -770 | 3.1 | 4.3 |

Please amend claims 13 and 34 as follows:

13. (Amended) A photosensitive member comprising:

a photosensitive layer; and

an exterior surface layer containing tantalum doped tin oxide having the mean particle size of 0.3 to 1.0 micro-meters.

34. (Amended) A photosensitive member comprising:

a substrate;

a charge generating layer being formed on the substrate and containing an organic charge generating material;

a charge transporting layer being formed on the charge generating layer and containing an organic charge transporting material and a first binder resin; and

an exterior surface layer being formed on the charge transporting layer and containing tantalum doped tin oxide having the mean particle size of 0.3 to 1.0 micrometers and a second binder resin.